

AEMC Simple Logger® II Data Loggers

NEW

- · Compact size, battery operated
- Easily installed, operational in seconds
- TRMS measurement for accuracy on distorted waveforms
- Programmable alarm setpoints & triggers
- 5 LED indicators display logger status
- · Choice of data storage modes
- Stores >240k measurements in non-volatile memory
- DataView software displays & analyzes real-time data on a PC







L642

MODEL	L101	L102	L111	L261	L322	L432
Channels	One	Two	One	One	One	Two
Input Connector	BN	NC	Recessed banana ja	cks	Removeable so	rew term block
Measurement Range	0-1V AC (prob	oe dependent)	0-1A AC (probe dependent)	0-600V AC/DC	±20mA DC	±100mV/±1V/±10V
Resolution	0.1	mV	0.1mA	0.1V	0.01mA	0.1mV/1mV/10mV
Accuracy (50/60Hz)	10-50mV: ±0.5	% of Rdg ±1mV	10-50mA: ±0.5% of Rdg ±1mA	5-50V: ±0.5% of	±0.25% of	±0.5% of Rdg ±1mV
				Rdg ±1V	Rdg ±0.05mA	
	50-1000mV: ±0.5	5% of Rdg ±0.5mV	50-1000mA: ±0.5% of Rdg ±0.5mV	50-600V: ±0.5%		
				of Rdg ±0.5mV		
Sample Rate		64 samples/cycle			Max. 8 sample	es at storage interval
Storage Rate	Programmable from 125mS to 1 day					
CAT III Rating		50V				50V

L322

MODEL	L562		
Channels	Two		
	Current Channel	Voltage Channel	
Input Connection	BNC	Banana jacks	
Input Range*	0 to 1VAC	0 to 600VAC/DC	
	(use current probes with a voltage output)		
Resolution	0.1mA	0.1V	
Accuracy (50/60Hz)	10-50mV: ±0.5% of Rdg ±1mV	5-50V: ±0.5% of Rdg ±1V	
	50-1000mV: ±0.5% of Rdg ±0.5mV	50-600V: ±0.5% of Rdg ±0.5V	
Measurement Input	5Vrms (±7.07V pk-pk max)	1000V	
Sample Rate	64 samples/cycle		
Storage Rate	Programmable from 125mS to 1 day		
CAT III Rating	600V		

	SPECIFICATION	S
Memory	240,000 measurements (512KB)	
Recording Length	15 minutes to 8 weeks, programmable DataView®	le using
Storage Modes	Start/Stop, FIFO and Extended	Recording Mode (XRM™)
Communication	USB 2.0 optically isolated	
Power	2 x 1.5V AA-cell Alkaline batteries	
Battery Life	100 hrs to >45 days, depending on s	torage rate
Dimensions	5.38 x 2.75 x 1.28" (136 x 70 x 32m	ım)
Temperature	-10 to 50°C operating	

remperature	-10 to 50 °C operating
	ORDERING INFORMATION
AE/2126.02	Simple Logger ® II Model L101 (TRMS, 0 to 1VAC, 1 channel)
AE/2126.03	Simple Logger ® II Model L102 (TRMS, 0 to 1VAC, 2 channel)
AE/2126.04	Simple Logger ® II Model L111 (TRMS, 0 to 1AAC, 1 channel)
AE/2126.05	Simple Logger ® II Model L261 (TRMS, 0 to 600VAC/DC, 1 channel)
AE/2126.06	Simple Logger ® II Model L322 (4-20mA DC)
AE/2126.07	Simple Logger ® II Model L432 (±100mV,1V,10VDC, 2 channel)
AE/2126.35	Simple Logger ® II Model L562 (TRMS Voltage & Current)
AE/2126.08	Simple Logger ® II Model L642 (Thermocouple Temperature)
AE/2126.01	Simple Logger® II Model CL601 (Clamp-On, TRMS Current, 0 to 600A, 1.65" jaw opening)
	ACCECCODIFE
	ACCESSORIES
AE/1201.51	AC/DC Current Probe Model SL261 (10A@100mV/A, 100A@10mV/A, BNC)
AE/2115.82	AC Current Probe Model MN261 (24A@100mV/A, 240A@10mV/A, BNC)
AE/1200.72	AC Current Probe Model MR461 (60A@10mV/A, 600A@1mV/A, BNC)

AE/ 2110.90 AC Current Probe Model JM861 (30A@10mV/A, 300A@1mV/A, 3000A@0.1mV/A, BNC)

AC Current Probe Model SR661 (10A@100mV/A, 100A@10mV/A, 1000A@1mV/A, BNC)

AE/1200.73 AC Current Probe Model MR561 (150A@10mV/A, 1500A@1mV/A, BNC)

Test Lead Pair, 5 ft w alligator clips, 600V CAT IV, 15A

AE/2113.49

AE/2140.62

MODEL	L642
Channels	Two
Input Connection	Mini TC
Measurement Range	°F(°C)
J	-346 to +2192 (-210 to + 1200)
K	-328 to +2501 (-200 to + 1372)
T	-418 to +752 (-250 to + 400)
N	-328 to +2372 (-200 to + 1300)
E	-238 to 1742 (-150 to + 950)
R	32 to 3212 (0 to 1767)
S	32 to 3212 (0 to 1767)
Resolution	0.1° C/F up to 1000° C/F, 1° above 1000° C/F
Accuracy	0.1% to 0.2% + 0.6° to 1°, depending on the
Comple Data May	range & T/C type
Sample Rate Max.	8 samples at storage interval
Storage Rate	Programmable from 5 sec to 1 day
CAT III Rating	50V

CLAMP-ON AC LOGGER

Simply clamp-on and start recording, no exposed wires to connect.

- 50/400/600A TRMS ranges
- · One button operation
- Alarm function
- 5 LED indicators display logger status
- · Optically isolated USB 2.0 output
- Includes DataView® software for data storage, real-time display, analysis & report generation
- 300V CAT IV, 600V CAT III





Each Simple Logger® II includes USB cable, Dataview CD, batteries & manual.



Extech Sound Meters

Datalogging Sound Level Meter

- ANSI Type 2 meter with 16000 record memory
- Large LCD with fast 50 segment bargraph
- Time stamped data, Max Hold function
- RS-232 & recorder outputs
- Tripod mounting



-	-	-		_		7.1	Ne
-	-	-	-		 •		V

407764

Range:	30-130dB
Basic Accuracy:	±1.5dB
Weighting:	A & C
Response Time:	Fast, slow
Dimensions:	10.4 x 2.8 x 0.8" (265x72x21mm)

ORDERING INFORMATION

Complete with microphone, wind cover, Windows software, serial cable, AA batteries & carrying case.

EX/407764	Datalogging Sound Level Meter
EX/144117	120V AC Adapter
EX/407764-EXT	Microphone Extension Cable, 15ft (4.7m)
EX/407744	94dB Sound Calibrator
FX/407766	94/114dB Sound Calibrator

Sound Level Monitor

- Extra large display with bargraph
- · Adjustable high or low limit
- OVER display
- External alarm output
- Time stamped Max reading memory
- Meets ANSI Type 2
- Wall, bench or tripod mounting





NEW

	SPECIFICATIONS
Frequency:	31.5Hz – 8kHz
Ranges:	30-80dB, 60-110dB, 80-130dB
Resolution:	0.1dB
Weighting:	A & C
Response Time:	Fast (125ms), Slow (1s)
Dimensions:	8.75 x 7.1 x 1.25" (22x18x3.2mm)

ORDERING INFORMATION

Complete with swivel microphone, wind cover, AA batteries

•	· · · · · · · · · · · · · · · · · · ·
EX/SL130G	Sound Level Monitor with 110V AC Adapter
EX/SL125	Microphone Extension Cable, 15ft (4.7m)
EX/SL123	AC Alarm Relay Module, 9ft cable
EX/SL124	DC Alarm Relay Module, 9ft cable
EX/TR100	Tripod

Extech Clamp-On Power Datalogger

- 1000A Clamp measures 1Ø & 3Ø power to 600kW
- Display True Power, Apparent Power, Power Factor, True RMS Voltage & Current, Resistance and Frequency
- Dual display of kW+PF, kVA+PF, V+A, A+Hz or V+Hz
- Clamp jaws open to 1.8" (46mm)
- · Data Hold and Auto Power Off
- Built-in recorder datalogs up to 4000 readings
- 25 point data memory viewable on the LCD display
- Full function display on large 4-digit LCD with fast 40 segment bargraph, Peak Hold and Min/MAX

· CAT III-600V; CE

 Includes 9V battery, alligator clips, test leads, case, RS-232 module, Windows compatible software and cable



	SPECIFIC	CATIONS			
	Range	Resolution	Basic Accuracy		
True Power:	600kW	10W	±(2%rdg+5d)		
Apparent Power:	1000kVA	10VA	±(2%rdg+5d)		
Peak Current:	1000A	0.1A	±(6%rdg+10d)		
Peak Voltage:	600V	0.1A	±(6%rdg+10d)		
AC Current (40-500Hz):	1000A	0.1A	±(1.5%rdg+5d)		
DC Current:	1000A	0.1A	±(1.5%rdg+5d)		
AC Voltage (40-500Hz):	600V	100mV	±(0.5%rdg+5d)		
DC Voltage:	600V	100mV	±(0.5%rdg+5d)		
Frequency:	5kHz	0.1Hz	±(0.5%rdg+5d)		
Resistance:	10kΩ	1Ω	±(1%rdg+5d)		
Continuity:	Beeper when $<50\Omega$				
Dimensions/	10.2x3.7x1.8" (260x93x45mm)/				
Weight:	15.9oz (450g)				

,	lamp-on Power atalogger kit
	ith software
D W	lamp-on Power atalogger kit ith software & NIST ertificate
p p	C Line Splitter, 3-prong lug with x1 & x10 ostions, live voltage dicator







Fluke Clamp Meters

Seven new models offer an impressive array of innovative features with current ranges up to 1000A. Choose the model that matches the jobs you do.

- Auto shut-off maximizes battery life so the meter works when you need it
- Small body and jaws fit perfectly in your hand and into tight places
- Large, backlit display (on most models) is easy to see
- In-rush current function (on most models) for measuring starting current for motors, lighting, etc.
- Improved low current measurement accuracy from new microprocessor technology
- Meter controls are positioned so current measurements can be done with one hand (index finger on clamp opening lever and thumb on rotary switch)
- Handy display hold keeps measurements on the display
- CAT III 600V Rating

			SPECIFIC	ATIONS			
	Fluke 333	Fluke 334	Fluke 335	Fluke 336	Fluke 337	Fluke 321	Fluke 322
AC amps							
Range	0-400.0A	0-600.0A	0-600.0A	0-600.0A	0-999.9A	0-400.0A	40.00A/400.0A
Accuracy	2% ± 5 counts (50/60 Hz)	2% ± 5 counts (50/60 Hz)	2% ± 5 counts (50/60 Hz)	2% ± 5 counts (10-100 Hz) 6% ± 5 counts (100-400 Hz)	2% ± 5 counts (10-100 Hz) 6% ± 5 counts (100-400 Hz)	1.8% ± 5 counts (50/60Hz)	1.8% ± 5 counts (50/60Hz)
Crest factor	-	-	2.4 @ 500A 2.0 @ 600A add 2% for C.F.>2	3 @ 500A 2.5 @ 600A add 2% for C.F.>2	3 @ 500A 2.5 @ 600A 1.42 @ 1000A add 2% for C.F.>2	-	-
AC response	Averaging	Averaging	True-rms	True-rms	True-rms	Averaging	Averaging
DC amps							
Range	-	-	-	0-600.0A	0-999.9A	-	-
Accuracy	-	-	-	2% ± 3 counts	2% ± 3 counts	-	-
AC volts							
Range	0-600.0V	0-600.0V	0-600.0V	0-600.0V	0-600.0V	0-600.0V	0-600.0V
Accuracy	1% ± 5 counts (50/60 Hz)	1% ± 5 counts (50/60 Hz)	1% ± 5 counts (50/60 Hz)	1% ± 5 counts (20-100 Hz) 6% ± 5 counts (100-400 Hz)	1% ± 5 counts (20-100 Hz) 6% ± 5 counts (100-400 Hz)	1.2% ± 5 counts (50-400Hz)	1.2% ± 5 counts (50-400Hz)
AC Response	Averaging	Averaging	True-rms	True-rms	True-rms	Averaging	Averaging
DC volts							
Range	0-600.0V	0-600.0V	0-600.0V	0-600.0V	0-600.0V	-	400.0V/600V
Accuracy	1% ± 5 counts	1% ± 5 counts	1% ± 5 counts	1% ± 5 counts	1% ± 5 counts	-	1% ± 5 counts
Ohms							
Range	0-600.0Ω	0-600.0Ω 600-6000Ω	0-600.0Ω 600-6000Ω	0-600.0Ω 600-6000Ω	0-600.0Ω 600-6000Ω	0-400.0Ω	0-400.0Ω
Accuracy	1.5% ± 5 counts	1.5% ± 5 counts	1.5% ± 5 counts	1.5% ± 5 counts	1.5% ± 5 counts	1% ± 5 counts	1% ± 5 counts
Continuity	≤ 30Ω	≤30Ω	≤30Ω	≤ 30Ω	≤30Ω	≤ 30Ω	≤30Ω
Frequency							
Range	-	-	-	-	5-400 Hz	-	-
Accuracy	-	-	-	-	0.5% ± 5 counts	-	-
Trigger Level	-	-	-	-	10-100 Hz ≥5A 5-10 Hz ≥10A 100-400 Hz ≥10A	-	-
Inrush Integration time	-	100 mS	100 mS	100 mS	100 mS	-	-
MIN/MAX	-	-	-	-	•	-	-
Backlight	-	•	•	•	•	-	-
Display Hold	•	•	•	•	•	•	•
Size		9.4 x 3.1 x 1.6"		9.9 x 3.:	1 x 1.6"	7.5 x 2.5	x 1.4"
Max. Wire Diameter		1.2"		1.3	2"	1	

Operating Temperature: -10 $^{\circ}$ C to 50 $^{\circ}$ C (14 $^{\circ}$ F to 122 $^{\circ}$ F)

Temperature De-rating: Add 0.1 x specified accuracy for each °C above 28 °C or below 18 °C

Altitude: 2,500 meters for 330 series, 2000 meters for 320 series

Battery Life: Alkaline - approximately 150 continuous hours for 330 series, 100 hours for 320 series

Storage Temperature: -40 °C to 60 °C (-40 °F to 140 °F) for 330 series, -30 °C to 60 °C (-22 °F to 140 °F) for 320 series

Warranty: 3 years on 330 series, 2 years on 320 series



337 🛕









ACCESSORIES

Included accessories
Soft Carrying Case, TL75 Test
Leads, (2) AA Alkaline Batteries,
Coated Instruction Card & Safety
Information Sheet

Fluke 321	AC Clamp Meter
Fluke 322	AC/DC Clamp Meter
Fluke 333	400A AC Averaging
	Clamp Meter
Fluke 334	600A AC Averaging
	Clamp Meter
Fluke 335	400A AC TRMS
	Clamp Meter
Fluke 336	600A AC/DC TRMS
	Clamp Meter
Fluke 337	1000A AC/DC TRMS
	Clamp Meter



Yokogawa Clamp-On Testers

AC Current CL100 Series

- AC Current to 2000A
- AC Voltage Measurement
- · Resistance / Continuity (CL130 & CL150)
- Data Hold
- IEC CAT III

CL130



AC/DC Current CL200 Series

- · AC & DC Current to 2000A
- AC & DC Voltage Measurements
- Resistance / Continuity
- TRMS & Frequency (CL235 & CL255)
- Peak / Data Hold

CL250



AC Leakage Current CL300 Series

- AC Current to 1000A
- AC Leakage with 10µA Resolution
- Wide Jaw Opening
- AC & DC Recorder Outputs (CL360)
- · Peak / Data Hold



CL360

	ORDERING INFORMATION				
YE/CL120	200A AC Clamp-On Tester				
YE/CL130	600A AC Multi-Function Clamp-On Tester				
YE/CL135	600A AC TRMS Multi-Function Clamp-On Tester*				
YE/CL150	2000A AC Multi-Function Clamp-On Tester				
YE/CL220	300A AC/DC Clamp-On Tester				
YE/CL235	600A AC/DC TRMS Multi-Function Clamp-On Tester				
YE/CL250	2000A AC/DC Multi-Function Clamp-On Tester				
YE/CL255	2000A AC/DC TRMS Multi-Function Clamp-On Tester				
YE/CL320	200A AC Clamp-On Leakage Tester				
YE/CL340	400A AC Clamp-On Leakage Tester				
YE/CL360	1000A AC Clamp-On Leakage Tester				
*same feature	*same features as CL130, except TRMS				

Limited Lifetime Warranty on all Models

	Entitled Entering Warranty of an inodess													
								F	unc	tior	ıs			
Model No.	Display	DC Current	AC Current	DC Voltage	AC Voltage	Resistance	TRMS	Frequency	Continuity Check	Peak Hold	Data Hold	Recorder Output	Jaw opening capacity	Rating
CL120	2000	-	20/200A (2 ranges)	-	300V (1 range)	-	-	-	-	-	•	-	24mm 0.95"	CAT III 300V
CL130	2000	-	200/600A (2 ranges)	-	200/600V (2 ranges)	200Ω (1 range)	-	-	•	-	•	-	33mm 1.30"	CAT III 600V
CL150	4000	-	400/2000A (2 ranges)	40/400/750V (3 ranges)	40/400/750V (3 ranges)	400/4000/40k/400kΩ (4 ranges)	-	-	•	-	•	•	55mm 2.16"	CAT III 600V CAT II 1000V
CL220	4000	40/300A (2 ranges)	40/300A (2 ranges)	-	-	-	-	-	-	-	•	-	24mm 0.95"	CAT III 300V
CL235	4000	400/1000A (2 ranges)	400/600A (2 ranges)	40/400/600V (3 ranges)	40/400/600V (3 ranges)	400/4000Ω (2 ranges)	•	•	•	•	•	-	33mm 1.30"	CAT III 600V
CL250	4000	400/2000A (2 ranges)	400/2000A (2 ranges)	40/400/1000V (3 ranges)	40/400/750V (3 ranges)	400/4000Ω (2 ranges)	-	-	•	•	-	•	55mm 2.16"	CAT III 600V CAT II 1000V
CL255	4000	400/2000A (2 ranges)	400/2000A (2 ranges)	40/400/1000V (3 ranges)	40/400/750V (3 ranges)	400/4000Ω (2 ranges)	•	•	•	•	•	•	55mm 2.16"	CAT III 600V CAT II 1000V
CL320	2000	-	20/200mA 200A (3 ranges)	-	-	-	-	-	-	-	•	-	24mm 0.95"	CAT III 300V
CL340	4000	-	40/400mA 40/400A (4 ranges)	-	-	-	-	-	-	•	•	-	40mm 1.57"	CAT III 300V
CL360	2000	-	200mA 2/20/200/1000A (5 ranges)	-	-	-	-	-	-	•	•	•	68mm 2.68"	CAT III 300V

Extech Clamp Meters

Model EX623

NEW

400A Dual Input Clamp Meters + IR Thermometer + Non-Contact Voltage Detect

- TRMS AC Voltage & Current measurements
- Dual type K thermocouple input with Differential Temperature function
- Non-contact Voltage detector with LED alert
- Non-contact IR Thermometer with laser pointer for locating hot spots
- DC Voltage, DC Current, Resistance, Capacitance, Frequency & Duty Cycle functions
- · Autoranging with manual override
- Data Hold plus fast Peak Hold for surges
- Complete with test leads, 9V battery, two Type K bead wire probes and case





Model MA640

600A True RMS Clamp Meters + Non-Contact Voltage Detect

- TRMS AC Voltage & Current measurements
- Non-contact Voltage detector with LED alert
- DC Voltage, DC Current, Resistance, Capacitance, Frequency, Temperature, Duty Cycle
- Relative Mode for Capacitance Zero and Offset Adjustment
- Data Hold and MIN/MAX
- Complete with test leads, Type K bead wire probe, 9V battery and carrying case



Model MA640

800A Clamp Meters

- AC/DC Current, AC/DC Voltage, Resistance, Frequency, Capacitance, Temperature, Diode Test and Continuity
- True RMS models
- 1.2" (30mm) circular jaw opening
- Backlit LCD
- Peak, Data Hold, Auto power off
- DC Current with Zero (EX730)
- Complete with test leads, 9V battery, Type K bead wire probe (EX720, EX730) and carrying case



Model EX730

Model 380941

200A AC/DC Mini Clamp plus MultiMeter

- · High resolution to 10mA
- Measures voltage, resistance and frequency
- Fast 40 segment bargraph
- One touch auto zero for DC current measurements
- Min/Max
- · Data hold and auto power off
- Complete with test leads, wrist strap,
 2 AA batteries and carrying case

30A True RMS AC/DC Mini Clamp

- Measure low AC/DC current with resolution to 1mA DC and 0.1mA AC
- Also measures voltage
- Fast 40 segment bargraph
- One touch auto zero for DC current measurements
- Min/Max
- Data hold and auto power off
- Complete with test leads, wrist strap,
 2 AA batteries and carrying case



A 1

Model 380942

SPECIFICATIONS SPECIFICATIONS								
Model	EX623	MA640	380941	380942	EX710	EX720	EX730	
AC Sensing:	TRMS	TRMS	Averaging	TRMS	Averaging	TRMS	TRMS	
Display counts:	4000	6000	4000	4000	4000, backlit	4000, backlit	4000, backlit	
Jaw size/ Cable size:	1.4" (36mm)	1.5" (40mm)	0.9" (23mm); 4/0 AWG	0.9" (23mm); 4/0 AWG	1.2" (30mm): 500MCM	1.2" (30mm): 500MCM	1.2" (30mm): 500MCM	
AC Current:	400μΑ , 40Α, 400Α	60A, 600A	40A, 200A	400mA, 4A, 30A	800A	800A	800A	
DC Current:	400μΑ , 40Α, 400Α	60A, 600A	40A, 200A	4A, 30A			800A	
Max resolution:	0.1μΑ, 0.01Α	0.01A	0.01A	AC: 0.1mA, DC: 0.001A	0.01A	0.01A	AC: 0.01A, DC: 0.1A	
Basic AC/DC Accuracy:	±1.5%	±2.8%	±1.0%	±1.5%	±2.8%	±3%	AC: ±3%, DC: ±2.5%	
AC/DC Voltage (Max. Res.):	AC: 600V (0.1V) DC: 600V (0.01mV)	AC: 600V (1mV) DC: 600V (0.01mV)	400V (0.1V)	400V (1V)	600V (0.1mV)	600V (0.1mV)	600V (0.1mV)	
Resistance (Max Res.):	40ΜΩ (0.01Ω)	$60M\Omega (0.1\Omega)$	400Ω (0.1Ω)		$40M\Omega (0.01\Omega)$	40MΩ (0.01Ω)	40ΜΩ (0.01Ω)	
Capaciatance (Max Res.):	40mF (0.01nF)	4000μF (0.01nF)			40mF (0.001nF)	40mF (0.001nF)	40mF (0.001nF)	
Frequency (Max. Res.):	100MHz (0.01Hz)	10kHz (0.01Hz)	1000kHz (0.01Hz)		4kHz (1Hz)	4kHz (1Hz)	4kHz (1Hz)	
Temperatures (Type K):	-58 to 1832°F	-4 to 1400°F				-4 to 1832°F/ -20 to 1000°C	-4 to 1832°F/ -20 to 1000°C	
IR Temperature:	-58 to 518°F							
Diode/Continuity:	Yes	Yes	Continuity		Yes	Yes	Yes	
Data Hold:	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Min/Max/Peak:	Yes	Yes	Min/Max	Min/Max	Peak	Peak	Peak	
Safety Rating:	CAT III-600V	CAT III-600V	CAT III-300V	CAT III-300V	CAT III-600V	CAT III-600V	CAT III-600V	

Ideal Clamp Meters

Backlit TightSight™ bottom display for viewing in dark, bright, or tight locations.

- 600A & 1000A models
- Two backlit LCD displays
- Voltage-presence warning on all functions
- · Tapered jaws with hook tip
- Max/min
- Peak max/min (1ms)
- Audible continuity
- · Selectable auto power off
- Data hold
- Low battery indicator
- Hinged rubber cover protects end display
- CATIV- 600V, CATIII-1000V rating





Jaw Size 2" (51 mm)						
Range	61-772	61-774	Accuracy			
AC Current	400.0	/1000 A	1.7%			
DC Current		400.0/1000 A	1.5%			
AC Voltage	400.0m/4.000/4	400.0m/4.000/40.00/400.0/750 V				
DC Voltage	400.0m/4.000/4	400.0m/4.000/40.00/400.0/1000 V				
Resistance	400.0/4.000k/	/40.00k/400.0k/	1.0%			
	4.000M/	10.00M Ω				
Capacitance		4.000μ/40.00μ	3.0%			
		400.0μ/4.000m F				

SPECIFICATIONS - 770 SERIES

ORDERING INFORMATION

Includes leads, alligator clip and case					
SP/61-772	1000AAC TRMS Clamp Meter				
SP/61-774	1000AAC TRMS Clamp Meter w/				
	DC Current, Capacitance				
SP/61-764	600AAC Clamp Meter				
SP/61-766	600AAC TRMS Clamp Meter w/				
	Capacitance, Frequency, 40A Range				
SP/61-768	600AAC TRMS Clamp Meter w/				
	DC Current				

SPECIFICATIONS - 760 SERIES

Jaw Size 1.42" (36 mm)

Range	61-764	61-764 61-766 61-768		Accuracy
AC Current	400.0/600 A	40.00/400.0/600 A	400.0/600 A	1.7%
DC Current			400.0/600 A	1.5%
AC Voltage	2	400.0m/4.000/40.00/400.0/750	0 V	1.2%
DC Voltage	4	0 V	0.5%	
Resistance	400.0/4	1.0%		
Capacitance		4.000µ/40.00µ		3.0%
		400.0μ/4.000m F		
Frequency		0.020k to 0.400k Hz		0.1%
		Sensitivity is 20-100 Hz(≥ 5A)		
		100-400Hz(≥ 10A)		

Megger Clampmeters

MULTI-CORE CLAMPMETER



- Measure single, two or three core cables
- No need to split wires
- · Cable centering clamp
- · Backlit display

MMC850

LEAKAGE CLAMPMETER



- 0.01mA resolution for measuring earth leakage currents
- Amp ranges for standard current measurements
- Analog bargraph display for trending
- 40mm jaw opening

DCM300E

SPECIFICATIONS

AC Amps		
Mode:	Single-Core Mode	Multi-Core Mode
Range:	200A	100A
Resolution:	0.1A	0.1A
Accuracy:	±1.5% ±3d	±5% ±10d
Frequency:	45Hz - 1kHz	45Hz - 400Hz
Main Jaw Capacity:	13mm (0.51")	
Inner Jaw Capacity:	22mm (0.87")	
Display:	3½ digit, 2000 cour	nt
Operating Temp.:	0°C to +40°C, <80%	RH
Storage Temp.:	-20°C to +60°C, <70	9% RH
Battery:	9V Alkaline	
Battery Life:	180hrs typical	
Dimensions:	8.94" x 3.7" x 1.75	' (227 x 94 x 44.5mm)
Safety:	IEC1010-2-032, CAT	III 600V

SPECIFICATIONS

Ranges:	30mA/300mA/30A/300A (50/60Hz)
Accuracy:	
30/300mA:	±1.2% rdg ±5d
0-200A:	±1.2% rdg ±5d
200-250A:	±3.0% rdg ±5d
250-300A:	±5.0% rdg ±5d
Circuit Voltage:	600V AC max.
Jaw Capability:	40mm (1.57")
Display:	3 ¹ / ₂ digit, 3200 count
Data Hold:	Indicated by DH in display
Operating Temp.:	0°C to +40°C, <80% RH
Storage Temp.:	-20°C to +60°C, <70% RH
Battery:	2 LR44 button cells
Dimensions:	2.5" x 7" x 0.9" (64 x 176 x 23mm)
Safety:	300V phase to earth, 500V phase to phase CAT III or 600V CAT II

ME/MMC850	Multi-Conductor AC Clamp Meter with carrying case
MF/DCM300F	Leakage Clampmeter with carrying case

Fluke Leakage Clamp Meter

NEW

- Measure leakage current with 1 μ A resolution, for monitoring of insulation erosion
- Measure to 60 A, for general installation needs
- Perform tests without powering down the installation or disconnecting equipment
- Advanced shielding ensures accurate results when measuring near other conductors
- Easy-to-carry, pocket-sized clamp with 40 mm (1.5") jaw size
- Handy "Display-Hold" button for capturing readings in hard-to-reach places
- Auto power-off, with warning buzzer, saves battery life
- Meets safety standard VDE0404-4 and VDE0702 for leakage current and differential current measurement of electrical appliances





DD	EDI	MEO	D N/I //	TION
 		 7 T T T T	A 4 1 7 7 2	1 1 1 1 1 1

Fluke-360 Leakage Current Clamp Meter

	SPECIFICATIONS
Ranges:	3 ma, 30 mA, 30 A, 60 A
Resolution:	0.001 mA, 0.01 mA, 0.01 A, 0.1 A
Accuracy:	± 1% rdg ± 5d (≤50 A)
(50/60 Hz)	± 5% rdg ± 5d (>50 A)
Frequency range:	15-150 Hz
Maximum current:	60 A rms
Digital display:	3200 count LCD
Bargraph display:	32 segment LCD
Measurement cycle:	2/sec. (digital display), 12 /sec. (bargraph display)
Range switching:	Auto-range
Environment:	0-50 °C, <80 % RH (non-condensing)
Temperature coefficient:	<0.05 % of range/ °C (0-18 °C & 28-50 °C, <50 A)
Influence of external	0.0005 % typical (on current value of adjacent cable)
magnetic field:	
Influence of	Within accuracy
conductor position:	
Circuit voltage:	≤ 300 Vrms
Safety standard:	EN 61010-1, EN 61010-2-032. 300 V CAT II, Pollution Degree 2
Battery type:	3 V Lithium battery (CR2032)
Battery life:	Approx. 90 hours (continuous use)
Conductor diameter	40 mm (1.57") max.
Dimensions:	176 x 70 x 25 mm (6.9" x 2.8" x 1")

Hioki AC Power Monitors

Clamp-On Power HiTester

- Measure up to two 3Ø, 3-wire systems
- Measure up to four 1Ø, 2-wire systems
- 5A to 5000A range
- Simultaneous recording of demand values and harmonics
- Ideal for troubleshooting & energy management



3169

3169 SPECIFICATIONS 1Ø 2-wire, 1Ø 3-wire, 3Ø 3-wire, 3Ø Systems: Accuracy: ±0.2% rdg ±0.1% f.s. + Clamp 4-wire (50/60 Hz) accuracy (for active power) With 9660: $\pm 0.3\%$ rdg $\pm 0.02\%$ FS Functions: ACV, ACA, W, VA, VAr, PF, integrated power, Frequency, Harmonics With 9661: ±0.3% rdg ±0.01% FS 150/300/600V Ranges: With 9669: $\pm 1.0\%$ rdg $\pm 0.01\%$ FS With 9660: 5-100A, 4 ranges With 9667: ±2.0% rdg ±1.5 mV With 9661: 5-500A, 5 ranges With 9694: $\pm 0.3\%$ rdg $\pm 0.02\%$ FS With 9669: 100A-1kA, 3 ranges Harmonics: Up to the 50th order, ±3% FS + With 9667: 500A-5kA, 2 ranges measurement accuracy With 9694: 0.5A-5A, 3 ranges 100 to 240VAC, 50/60 Hz Power: 75W to 9MW, 108 combination 8.3"W x 6.3H x 2.4"D Power: Dimensions:

Power Quality Analyzer

- Measure Dips, Swells, Interruptions, Flicker, Transients
- · Harmonic to the 50th order
- · High frequency transient over voltage
- · Detection and waveform display
- 4 current and 4 voltage channels



patterns

3196

ORDERING INFORMATION			
Order Clamp-on Se	ensor Separately		
HK/3169-20	Clamp-On Power HiTester, with voltage leads		
HK/3196	Power Quality Analyzer, with voltage leads		
HK/9660	100A Clamp-On Sensor		
HK/9661	500A Clamp-On Sensor		
HK/9669	1000A Clamp-On Sensor		
HK/9667	5000A Flexible Clamp-On Sensor		
HK/9694	5A Clamp-On Sensor		
Other Options:	Printer, memory cards, PC software, carrying case		

Systems:	1Ø 2-wire, 1Ø 3-wire, 3Ø 3-wire, 3Ø 4-wire (50/60 Hz)
Ranges:	Ch1, Ch2, Ch3: 150/300/600V AC
_	Ch4: 60/150/300/600V AC, 60/600V DC
	9660: 50/100A, 9661: 50/500A, 9667: 500/5000A,
	9669: 1000A
Measurements:	Transient overvoltage
	2. Voltage swell, Voltage dip, Voltage interruption
	3. Frequency, Voltage, Current, Voltage/Current peak,
	Active/Reactive / Apparent power, Power factor, DPF
	4. Voltage unbalance ratio, Current unbalance ratio
	5. Harmonic voltage/current/power, Inter harmonic
	voltage/current, Harmonic voltage current phase angle,
Total harmonic/inter	harmonic distortion
	6. IEC flicker[Pst, Plt], K factor / ΔV10(Japan)
Internal Memory:	13MB
Interface:	Flash ATA card (up to 528MB), RS-232C, LAN
	(10BASE-T), HTTP server function
Power:	Rechargeable battery & AC adapter
Dimensions:	11.8"W x 8.5"H x 2.7"D

3196 SPECIFICATIONS



AEMC Ground Resistance Testers

Digital Ground Resistance Tester Models 4620 & 4630



4630

- Measures soil resistivity (4-Point) method
- Measures ground resistance (2- and 3-Point) Fall-of-Potential method
- Step voltage tests and touch potential measurements
- Auto-Ranging: automatically selects the optimum range
- Designed to reject high levels of noise and interference
- Extremely simple to operate: connect – press – read
- LED on faceplate informs operator of high input noise, high auxiliary rod resistance and fault connections
- Large easy-to-read backlit display
- Battery powered (Model 4620)
- AC powered with rechargeable NiMH batteries (Model 4630)
- Rugged dustproof and rainproof field case

 Can also be used for continuity tests on bonding



Clamp-On Ground Resistance Tester Models 3711 & 3731



3731 US Patent No. 362,639



- Simple and fast clamp-on operation — no leads, no auxiliary rods or spacing requirements
- Direct reading of ground resistance from 0.1Ω to 1200Ω
- Direct reading of continuity and ground loop resistance
- Direct reading of ground leakage or phase current from 1mA to 30Arms
- Jaw design with large 1.25" (32mm) window – accommodates up to 1000MCM cables
- Auto-Off for power management
- Alarm function with adjustable set point and buzzer for quick field checks (Model 3731)
- Memory function to store 99 field measurements for later retrieval and analysis (Model 3731)
- Meets EN 61010-1, Cat. III and CE Mark

NEW

- Rugged Lexan® head and body construction resists breakage
- Alarm settings and stored memory information saved during shutdown (Model 3731)
- Patented design

Multi-Function Ground Resistance Tester Models 6470B & 6472

- 2- and 4-Wire Bond Resistance/Continuity measurement
- 3-Point Fall-of-Potential measurement with manual/automatic frequency selection
- 4-Point soil resistivity measurement with automatic calculation of Rho & user selection of Wenner or Schlumberger method
- 3-Point earth coupling measurement
- Frequency scan 40-513Hz for testing in electrically noisy environments
- Selectable test voltage of 16 or 32V up to 250mA of test current
- Automatic recognition of all electrode connections & resistance
- Stores up to 512 complete test results
- · Optically isolated USB communication
- Rechargeable NiMH batteries from wall charger or vehicle power
- Rugged dustproof and rainproof field case
- Includes DataView® software for remote operation, data storage, real-time display, analysis, report generation & system configuration

Model 6742 adds:

- Manual and automatic frequency scan to 5078Hz
- Measures Ground Resistance using the 2 clamp method (selective ground testing)
- Measures Ground Impedance up to 5kHz to test lightning strike protection

Tester includes meter, NiMH batteries, optical USB cable, DataView® software, external battery charger, power cord, user manual.

Kit includes Tester, test leads, 30 ft ground lead (green), auxiliary ground electrodes, spaded lugs, 100 ft tape measure, ground tester workbook CD, carrying bag for meter, carrying bag for kit.





AE/2130.43	Ground Resistance Tester Model 4620 (4-Point, Digital, Battery Powered)	AE/2135.02 Ground Resistance Tester Model 6470B 3-point Kit – 150 ft leads
AE/2130.44	Ground Resistance Tester Model 4630 (4-Point, Digital, Rechargeable Battery)	AE/2135.04 Ground Resistance Tester Model 6470B 4-point Kit - 500/100 ft leads AE/2135.51 Ground Resistance Tester Model 6472
AE/2130.45	Ground Resistance Tester Model 4620 Kit	AE/2135.52 Ground Resistance Tester Model 6472 3-point Kit – 150 ft leads
AE/2130.46 AE/2117.60	Ground Resistance Tester Model 4630 Kit Ground Resistance Tester Model 3711 (Clamp-On)	AE/2135.52 Ground Resistance Tester Model 6472 4-point Kit - 500/100 ft leads
AE/2117.61	Ground Resistance Tester Model 3731 (Clamp-On with memory and alarm)	AE/2135.71* AC Current Probe Model MN82 for use with Model 6472
AE/2135.01 (Ground Resistance Tester Model 6470B	AE/2135.72* AC Current Probe Model SR182 for use with Model 6472

^{*2} probes required for two clamp testing method.



Megger® Clamp-on Testers



Ground Resistance Testers

- Easy, fast clamp-on operation No rods or cables necessary
- Measures ground resistance from 0.025Ω to 1500Ω
- Measures ground leakage or phase current from 0.2mA to 35A
- Auto ranging with high and low alarms
- Automatic self calibration



APPLICATIONS

- Measure resistance and continuity of grounding loops around pads and buildings.
- Check multi-grounded systems without disconnecting the ground rod/stake under test.
- Measure leakage current flowing to ground or circulating in ground systems.
- Use on cell towers, RF transmitters and telecommunications sites.
- Inspect and verify lightning protection systems.
- Test consumer installations, including pools, spas, etc.

FEATURES

- Large LCD display screen can be read in bright sunlight.
- Large 1.36" (35mm) jaw opening to accommodate a variety of conductors.
- Indication of high noise content that may affect readings.
- · Hold function for difficult to reach installations.
- · Auto-off to save on battery power.
- Configurable high and low alarms with audible indication for fast field checks.
- On board storage of test results (up to 8180 records).
- Calibration check loop to insure proper operation.
- · Rugged construction for regular field use.
- Lightweight storage case contains complete testing kit.

Model DET20C includes RS-232 interface and software for downloading test data. Both models include battery, carrying case & calibration loop.

	ORDERING INFORMATION
ME/DET10C	Digital Earth Test Clampmeter
ME/DET20C	Digital Earth Test Clampmeter with RS-232 Interface

Hioki Battery Testers



- Test without disconnecting the batteries
- Three level indication: Pass, Warning, Fail
- Audible beeper (3555)
- PC Interface & software (3554)

Get an instantaneous check of battery condition based on internal resistance and voltage.

Model 3554 for medium and high capacity lead-acid batteries. Model 3555 for compact storage batteries used in portable telephones and similar applications.

SPECIFICATIONS				
	3554	3555		
Measurement Ranges:				
Ohms:	$3\mu\Omega$ - 3Ω	$300\mu\Omega$ - 30Ω		
# Ranges	4	3		
Best resolution	$1\mu\Omega$	100 μ Ω		
Accuracy	0.8% rdg +6d	0.8% rdg +6d		
Test Current	150mA-1.5mA	5mA-50μA		
DC Volts	±6V, ±60V	±3V, ±30V		
Best resolution	1mV	1mV		
Accuracy	0.08% rdg +6d	0.1% rdg +6d		
Temperature	-10 to +60°C			
Resolution	0.1°C			
Test Frequency	1kHz	1kHz		
Max. Input	60V DC	50V DC		
Comparator	Hi & low ohm limit, low volt limi	t (both models)		
# Limit Sets	200 stored	10 stored		
Data Memory	4800 data/limit sets			
Alert	LCD icon	LED & Beeper		
Batteries	9 x AA	6 x AA		
Life	up to 10 hrs	up to 18 hrs		
PC Interface	USB			
Operating Temp.	0-40°C, <80% RH non-conder	nsing		
Dimensions	7.7 x 5.1 x 2.2" (196x130x55n	nm)		

SUPPLIED ACCESSORIES 3554 Pin-type test leads, USB cable, data management software, carrying case, zero adjust board, batteries, spare fuse 3555 Pin-type test leads, batteries.

	ORDERING INFORMATION
HK/3554	Battery Tester (lead-acid batteries)
HK/3555	Battery Tester (portable batteries)
HK/9382	Carry case for 3555
HK/9453	4-terminal lead set
HK/9466	Remote Control Switch for 3554



Simpson Analog VOM

- Industry Standard Model 260 36 Measurement Ranges
- Mirrored Scale
- CAT III-600V (260-95)
- 10A AC (260-95)
- 1000V AC/DC Max (260-8)

ORDERING INFORMATION					
(Test Leads	(Test Leads Included)			ACCESSORIES	
Cat. #	Model #	Description	Cat. #	for Model	Description
SI/12388	260-8	General Purpose, Phenolic Case	SI/00043	260-8, 8P	Probe Set, threaded w/clips
SI/12391	260-8P	Relay Protected	SI/00125	260-8XI,	Probe Leads w/Screw-On
SI/12389	260-8RT	Roll Top Case		8XPI	Alligator Clips
SI/12392	260-8PRT	Relay-Protected, w/Roll Top Case	SI/00834	Any 260-8	Black nylon padded case
SI/12395	260-8XI	Yellow ABS Plastic Case	SI/00805	Any 260-8	Black Leatherette case
SI/12396	260-8XPI	Yellow Case, Relay-Protected	SI/00541	260-8XI, 260-8XPI, 9S, 9SP	250A AC Clamp
SI/12397	260-9S	Safety VOM Orange, with Case	SI/00545	260-8, 8P, 8RT, 8PRT, 95, 95P	250A AC Clamp
SI/12398	260-9SP	Safety VOM Protected, with Case	SI/00425	260-8X, 9	Screw-on alligator Clips







Triplett Analog VOM

- 58 Ranges & Functions (Model 60-NA)
- Withstands 5 Foot Drop
- 3 Year Warranty
- Mirrored Scale





	ORDERING INFORMATION				
TR/3145	Model 60 VOM (Orange Case)	Test Leads			
TR/3151	Model 60-NA (Gray Case)	TR/79-373	Miniature Clip Leads (female jack)		
Carrying Case	es	TR/79-374	48" Test Leads w/ Screw-On Alligator Clips (female jack)		
TR/10-823	639 Carrying Case (Top Opening)	AC Amps Cla	mp-On		
TR/10-2739	639-A Carrying Case (Snap back Cover)	TR/3264	Model 101-G Line Separator		
TR/4152	639-C Padded Cordura Carrying Case	TR/60-211	Model 10 Clamp-On AC AMP Adaptor (60, 60-NA)		
		TR/79-417	6' Attachment Leads (60/60-NA to Model 10)		

Weschler Columbia AC/DC Clamp-On Tong Test Ammeters

Ideal for verifying currrent in plating tanks, coating systems, welding equipment, motors, generators & transformers

- Instant Readings
- One Hand Operation
- No Transformers or Shunts Needed

The Tong Test Ammeter reads the true RMS (heating) value, regardless of wave shape. It contains no batteries, rectifiers, switches or electrical windings to overheat or burn out. Currents in lines up to 2300V can be measured if the cables are properly insulated. DC accuracy is 5% of full scale, AC accuracy (25-100Hz) is 2%, except 5% on ranges above 500A. Add 1% for 100-400Hz.

Plug-in Range modules: 0-100A, 0-150A, 0-200A, 0-300A, 0-400A, 0-500A, 0-600A, 0-800A, 0-1000A. The effective range can be lowered by winding two or more turns of the conductor around the tongs.



	ORDERING INFORMATION
Columbia AX	for conductors up to $1\frac{1}{2}$ " dia.
Columbia C	for conductors up to 2 ½ dia.
Columbia D	for conductors up to 3" dia. or
	bus bars to $4"x1"$ or $4\frac{1}{2}"x\frac{1}{2}"$
Specify range m	odel(s) when ordering.

WESCHLER INSTRUMENTS

Hioki Testers

MULTI-FUNCTION DMMS

- AC/DC Voltage & Current
- · Resistance & Continuity
- 9999 count LCD display
- Min/Max, Average & Relative values
- 4-20 mA measurement converts to 0-100% display
- Optional RS-232C package for PC data transfer



	SPECIFICATIONS
DC Volts:	4 ranges, 999.9mV to 999.9V (±0.3% rdg ±2d)
AC Volts:	4 ranges, 999.9mV to 999.9V (±1.2% rdg ±5d) 40-500Hz
Ohms:	6 ranges, 400.0Ω to $40.00M\Omega$ (±0.6 % rdg. ±3d)
DC Current:	6 ranges, 400.0µA to 10.00A (±0.2 % rdg. ±3d)
AC Current:	6 ranges, 400.0μA to 10.00A (±1.2 % rdg. ±5d) 50-2kHz
Other Functions:	Capacitance, Data hold, continuity ($<$ 10 Ω), diode check 3805: TRMS AC, freq to 50kHz, J&K thermocouples
Ranging:	Auto or Manual
Bar Display:	41 segment
Sample Rate:	3/sec (digital), 13/sec (bar)
Dimensions:	3" x 6.6" x 1.3" (76x167x33mm)
Accessories:	Test leads 3851-10, holster, battery
	ORDERING INFORMATION

	ORDERING INFORMATION	
HK/3804-50	4-Digit DMM	
HK/3805-50	4-Digit TRMS DMM	

PHASE DETECTOR



- LED & Buzzer Indicate Phase Direction
- No Electrical Connection
- Live Wire Check (R-S, S-T)
 - Battery Check & Auto Shut Off

3129

SPECIFICATIONS			
Detection Method:	Electrostatic induction		
Voltage Range:	70-600VAC, 50/60Hz		
Max. Wire Size:	0.67" (17mm) dia., insulated wire		
Standards:	Cat III, 600V		
Dimensions:	2.76"W x 2.95"H x 1.18"D		
Lead Length:	27" (0.7mm)		

	ORDERING INFORMATION
HK/3120	Voltage Detector, batteries included
HK/3129	Phase Detector, with carrying case & AA batteries
HK/3246	Pencil HiTester, battery included
HK/3280-10	Clamp-On HiTester, with leads, battery & carrying case
HK/3280-20	TRMS Clamp-On HiTester, with leads, battery & carrying case

VOLTAGE DETECTOR



3120

 ϵ

Detect AC Voltage in Insulated Wires

	SPECIFICATIONS
Voltage Range:	70-600VAC, 50/60Hz
Indication:	Red LED and continuous beep
Battery Check:	Green LED
Operating Temperature:	0 to 40 °C, <80%RH (non-condensing)
Standards:	CAT IV 600V, indoor use
Dimensions:	5.9"L x 0.7" dia (149 x 18.5mm)

CLAMP-ON HITESTERS



- Slim Body for Easy Clamping in Narrow Spaces
- Independent-opening Double-lever Jaw
- · Right or Left Hand Operation
- 4199 Count LCD
- True RMS Measurement (3280-20)







	SPECIFICATIONS
	SPECIFICATIONS
Function	Range (Accuracy)
AC Amps:	3280-10: 42 / 420 / 1000A (50/60Hz;
	±1.5% rdg ±5 d), 3280-20: 42 / 420/ 1000A
	(45-66Hz: ±1.5% rdg ±5d)
	(40-45Hz or 66Hz- 1kHz: ±2.0% rdg ±5d)
DC Volts:	420m / 4.2 / 42 / 420 / 600V
	$(\pm 1.3\%$ rdg ± 4 d)
AC Volts:	4.2 / 42 / 420 / 600V
	(50-500Hz, ±2.3%rdg ±8d)
Ohms:	$420 / 4.2k / 42k / 420k\Omega$ (±2.0% rdg ±4d),
	$4.2M\Omega$ (±5.0 rdg ±4d), $42M\Omega$ (±10.0% rdg ±4d)
Continuity:	420Ω (±2.0% rdg ±6d), buzzer <50Ω
Wire Size:	1.3" (33mm) max diameter
Allowable Current:	2000A AC rms max continuous
Overload Protection:	DCV/ACV: 600V DC/AC rms; Ω /Continuity:
	250V DC/AC rms
Operating Temperature:	0 to 40 °C, <80%RH (non-condensing)
Standards:	CAT III 600V(AC A), CAT II 600V(AC/DC V)
Dimensions:	2.2"Wx6.9"Hx0.6"D